Title (en)

Production of fluorocarbon compounds.

Title (de)

Herstellung von Fluorkohlenstoffverbindungen.

Title (fr)

Production de composés de fluorocarbone.

Publication

EP 0648530 A1 19950419 (EN)

Application

EP 94307579 A 19941014

Priority

ZA 937644 A 19931014

Abstract (en)

The invention provides a method and installation for the production of a desired fluorocarbon compound, which includes the steps of providing a high temperature zone; and feeding at least one input material into the high temperature zone to generate a body of hot gas including fluorine-containing species and carbon-containing species. The molar C:F ratio in the body of hot gas is controlled at a selected value between about 0,4 and 2; and the specific enthalpy of the body of hot gas is controlled between about 1kWh/kg and about 10kWh/kg for a time interval, so that a reactive thermal gaseous mixture forms, containing reactive species including reactive fluorine-containing precursors and reactive carbon-containing precursors. Thereafter the reactive thermal mixture is cooled at a cooling rate and to a cooling temperature selected to produce an end product including the desired fluorocarbon compound. The input material is typically a C1-C10 perfluorinated carbon compound of the general formula CnFm in which 0 < n </= 10, and m = 2n, 2n + 2, or 2n - 2 where n > 1, for example a gaseous fluorocarbon such as tetrafluoromethane (CF4).

IPC 1-7

B01J 19/08; B01J 12/00; C07C 17/269; C07C 17/23; C07C 21/185; H05H 1/34

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

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